

REMARKS

Entry of the foregoing, re-examination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. § 1.111, and in light of the remarks which follow, are respectfully requested.

By the present amendment, the specification has been amended to capitalize the trademarks cited therein, i.e., AEROSIL and HENSCHEL MIXER. Claim 4 has been amended to further define a wax. This amendment is supported by the specification, for example, page 8, forth full paragraph and Examples. Further, claim 6 has been amended to change its dependency to claim 4. In addition, claims 1-3 and 5 have been canceled without prejudice or disclaimer. Upon entry of the Amendment, claims 4 and 6 will be all the claims pending in the application.

I. Response to Objection to the Specification

The specification was objected to for containing trademarks without capitalization or designation.

In response, the specification has been amended to capitalize the trademarks cited therein. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the objection to the specification.

II. Response to Rejection under 35 U.S.C. § 112, Second Paragraph

Claims 1-4 and 6 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Applicants respectfully submit that this rejection is moot in view of the cancellation of claims 1-3.

III. Response to Rejection under 35 U.S.C. § 102(e)

Claim 1, 3, 4 and 6 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 7,105,260 to Terauchi et al., as evidenced by U.S. Patent No. 5,079,123 to Nanya et al. Applicants respectfully submit that the rejection of claims 1 and 3 is moot because claims 1 and 3 have been canceled. Further, Applicants respectfully submit that claims 4 and 6 as amended are novel over Terauchi et al. for at least the following reasons.

Independent claim 4 recites a binder resin for a toner, wherein the binder resin is obtained by mixing a polyester resin and a polyisocyanate, wherein the polyester resin is obtained by reacting a polyethylene terephthalate (PET) and/or a polybutylene terephthalate (PBT), a polycarboxylic acid, a polyhydric alcohol, and a wax, wherein the wax has two or more hydroxyl groups, two or more carboxyl groups, or one or more hydroxyl group(s) and one or more carboxyl group(s), in its molecule.

As described page 8, fourth full paragraph of the present specification, the wax is introduced into a side chain and a skeleton of the obtained polyester resin. The specification further demonstrates unexpected results of the presently claimed invention, by incorporating the wax in a side chain and a skeleton of the polyester resin.

Specifically, Examples 1-16 are toner particles obtained by using polyester resins having a wax introduced into a side chain and a skeleton thereof, and Comparative Examples 1-10 are toner particles obtained by using polyester resins not having a wax introduced into a side chain and a skeleton thereof. As the results in Tables 3, 6 and 7 of the specification show, each of Examples 1-16 exhibits at least three "1"s (i.e., less than 20%) and no "3" (i.e., more than 35%) in terms of "Fixing properties," "Offset resistance," "Development durability" and "Antiblocking properties" evaluation. In contrast, none of Comparative

Examples 1-10 exhibit three "1"s in the above mentioned evaluation, as shown in Tables 4 and 8. Moreover, Comparative Examples 2, 3 and 8-10 show "3"s in certain evaluation results.

Terauch et al. discloses a toner comprising a binder resin which comprises a polyester resin. The polyester resin is obtained by reacting (a-1) polyester resin α -7 and (a-2) polyester resin β -10 with a polyisocyanate and tolylene diisocyanate in the presence of a carnauba wax. The polyester resin α -7 is obtained by reacting polyethylene terephthalate (PET), a polycarboxylic acid compound, a polyhydric alcohol compound, triethylene glycol, and trimethylol propane. The polyester resin β -10 is obtained by reacting a recycled PET, a polycarboxylic acid compound, a polyhydric alcohol compound, and benzoic acid. These polyester resins α -7 and β -10 of Terauch et al. do not contain a wax introduced therein. In other words, a wax is not introduced into a side chain or a skeleton of the polyester resins described in Terauch et al. Therefore, Terauch et al. does not teach or suggest the polyester resin recited in present claim 4.

Applicants further advise that carnauba wax is generally composed with several % of free fatty acid, free alcohol, and 80-85 % of a straight chain monoester. The straight chain monoester, i.e., the main body of a carnauba wax, does not have any polar groups and is different from the wax recited in present claim 4. Although, in Terauch et al., some of free fatty acid might be introduced into a polyester resin during preparation, the main body of the wax is not introduced into the polyester resin.

Moreover, as noted above, the presently claimed invention can provide unexpected results in terms of fixing properties, offset resistance, development durability and antiblocking properties. Terauch et al. does not describe or suggest these effects.

In view of the foregoing, Applicants respectfully submit that claim 4 is novel and patentable over Terauch et al., and thus the rejection should be withdrawn. Additionally, claim 6 depends from claim 4 and thus is patentable over the cited reference at least by virtue of its dependency.

IV. Response to Rejections under 35 U.S.C. § 103(a)

a. Claim 2 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Terauchi et al., as evidenced by Nanya et al., combined with U.S. Patent No. 5,928,825 to Eguchi et al.

b. Claim 5 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over WO 02/21219 to Emura et al, as evidenced by U.S. Patent Application Publication No. 2003/0008225 to Emura et al., combined with Eguchi et al.

Applicants respectfully submit that these rejections are moot because claims 2 and 5 have been canceled.

V. Conclusion

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order and such action is earnestly solicited. If there are any

questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at (703) 838-6686 at his earliest convenience.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

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By:



Fang Liu, Ph.D.

Registration No. 51283

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620